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(54) Title: METHODS FOR PREVENTING AND TREATING ALZHEIMER'S DISEASE (AD)

(57) Abstract: The invention relates to the use of a compound comprising the following amino acid sequence X<sub>1</sub>X<sub>2</sub>X<sub>3</sub>X<sub>4</sub>X<sub>5</sub>X<sub>6</sub>, wherein X<sub>1</sub> is an amino acid, except of C, X<sub>2</sub> is an amino acid, except of C, X<sub>3</sub> is an amino acid, except of C, X<sub>4</sub> is an amino acid, except of C, X<sub>5</sub> is an amino acid, except of C, X<sub>6</sub> is an amino acid, except of C, and wherein X<sub>1</sub>X<sub>2</sub>X<sub>3</sub>X<sub>4</sub>X<sub>5</sub>X<sub>6</sub> is not DAEFRH, said compound having a binding capacity to an antibody being specific for the natural N-terminal Aβ42 sequence DAEFRH, and 5-mers thereof having a binding capacity to said antibody being specific for the natural N-terminal Aβ42 sequence DAEFRH, for the preparation of a vaccine for Alzheimer's disease.

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**INTERNATIONAL SEARCH REPORT**

International Application No  
PCT/EP2004/000162

**A. CLASSIFICATION OF SUBJECT MATTER**  
IPC 7 C07K14/47 A61K38/08

According to International Patent Classification (IPC) or to both national classification and IPC

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 C07K A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the International search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, MEDLINE, BIOSIS, EMBL

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 00/72880 A (SCHENK DALE B ; YEDNOCK TED (US); BARD FREDERIQUE (US); NEURALAB LTD () 7 December 2000 (2000-12-07) page 2, line 28 - page 6, line 14 page 14, line 19 - line 29 page 16, line 26 - page 17, line 20 ----- A REINEKE U ET AL: "Identification of distinct antibody epitopes and mimotopes from a peptide array of 5520 randomly generated sequences" JOURNAL OF IMMUNOLOGICAL METHODS, vol. 267, no. 1, 1 September 2002 (2002-09-01), pages 37-51, XP004372978 ISSN: 0022-1759 cited in the application the whole document -----	1-9
		-/-

Further documents are listed in the continuation of box C.

Patent family members are listed in annex.

\* Special categories of cited documents :

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the International filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the International filing date but later than the priority date claimed

- \*T\* later document published after the International filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \*&\* document member of the same patent family

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## INTERNATIONAL SEARCH REPORT

International Application No  
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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>MCLAURIN J ET AL: "Therapeutically effective antibodies against amyloid-beta peptide target amyloid-beta residues 4-10 and inhibit cytotoxicity and fibrillogenesis."</p> <p>NATURE MEDICINE, vol. 8, no. 11, November 2002 (2002-11), pages 1263-1269, XP002288573 ISSN: 1078-8956 abstract page 1266, right-hand column, last paragraph - page 1267, right-hand column, last paragraph</p> <p>-----</p>	1-9
P, X	<p>EP 1 361 439 A (PASTEUR INSTITUT) 12 November 2003 (2003-11-12) SEQ ID NO: 79 paragraph '0077!</p> <p>-----</p>	1-4, 9

# INTERNATIONAL SEARCH REPORT

International application No.

PCT/EP2004/000162

## Box No. I Nucleotide and/or amino acid sequence(s) (Continuation of item 1.b of the first sheet)

1. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, the international search was carried out on the basis of:
  - a. type of material
    - a sequence listing
    - table(s) related to the sequence listing
  - b. format of material
    - in written format
    - in computer readable form
  - c. time of filing/furnishing
    - contained in the international application as filed
    - filed together with the international application in computer readable form
    - furnished subsequently to this Authority for the purpose of search
2.  In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
3. Additional comments:

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

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Patent document cited in search report	Publication date		Patent family member(s)	Publication date
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EP 1361439	A	12-11-2003	EP 1361439 A1	12-11-2003
			WO 03096022 A2	20-11-2003